ENERGY: THE INTERNATIONAL DIMENSION

ENERGY OPTIONS: A CANADIAN DIALOGUE

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ENERGY: THE INTERNATIONAL DIMENSION

REPORT ON SEMINAR PROCEEDINGS

A. Introduction

The development of a Canadian energy policy and the importance of proper management in the energy sector are complex and controversial issues. The record of difficulties encountered by the National Energy Program (NEP) of 1980 makes fairly dismal reading and was largely a consequence of the pervasive build up of mistrust between energy industries, governments, and other key interests. Since then, a series of federal-provincial accords and continuing intergovernmental meetings have restored a more cooperative atmosphere for energy discussions at the official level.

It was against this background that the Honourable Marcel Masse, Minister of Energy, Mines and Resources, decided to initiate a public review to assess Canada's energy prospects and options into the twenty-first century. In proposing **Energy Options** in April 1987, the Minister said that the widest range of knowledge and opinion should be sought in this review. The Minister requested Mr. Thomas Kierans of Toronto to serve as Chairman of a 23 member Advisory Committee representing the regional and sectoral interests of Canada.

A concentrated effort was made to provide impartial settings for the discussions and to secure the involvement of all parties with an interest in the Canadian energy sector. This was meant to ensure that a full range of views and values would be included in the discussion of energy options. Participants were drawn from the energy industries, from energy users, from national and provincial government agencies with development, economic and environmental mandates, from environmental and conservation sectors, from native groups, and from academic and policy institutes. They are responsible for generating the suggestions and strategies which are outlined in this report.

A conference was organized in Calgary in June to identify key issues facing the energy sector. Senior leaders in all sectors with an interest in energy attended. From the discussion in Calgary, four policy areas were identified as issues that participants felt to be of greatest concern. These policy areas formed the basis for the organization of four policy dialogues which were held in the autumn on the topics of:

- Energy Efficiency and Technology;
- Energy and the Environment;
- Energy: The International Dimension; and
- Energy Pricing and Fiscal Principles.

The intent of these seminars was to seek perspectives on principles to guide energy policy. These seminars provided an opportunity for a number of participants from diverse backgrounds to express a wide range of viewpoints and discuss possible solutions to meet national and regional issues.

Two kinds of products have emerged from this process through the policy dialogues. First and foremost, there are the reports. Ideas, conclusions and recommendations generated by participants and consolidated in this document form an important part of the **Energy Options** process. These seminar reports provide the basis for a set of debating propositions prepared for the concluding conference in Montreal, and will also be forwarded to the Advisory Committee for use in the preparation of its report to the Minister.

Second and less evident, the **Energy Options** dialogues may be considered a learning experience for all participants, leading to a sharing of ideas towards a better understanding of the positions and views held by other interests and sectors.

This report is intended to summarize the information and advice generated by the participants at **Energy: The International Dimension Seminar.**

The objective of the seminar was to:

1) understand the possible shifts in US patterns of energy demand and supply and how Canadian exports of energy may be affected;
2) identify policy principles that should govern energy exports;
3) define energy security and assess options for providing security; and
4) review the relationship of foreign capital to development of Canadian energy resources.

The Seminar was co-sponsored by the Canadian Energy Research Institute chaired by Mr. Tony Reinsch, Manager, Institute Research, and was attended by 60 participants representing a broad cross-section of energy interests. In order to have a thorough discussion of key aspects of energy trade, the participants broke up into several small groups at the end of each plenary session to debate and discuss the issues. Each group then reported back to a plenary session the results of its discussions. The discussions were far-ranging and although there was seldom unanimity, what emerged from the deliberations was a broad sense of what the future direction of energy trade should be for Canada. These views are reported below.

B. Canada - U.S. Energy Trade

The direction of the seminar was influenced by questions and concerns raised by participants regarding the energy aspects of the proposed bilateral trade agreement between Canada and the United States. To provide as much background and insight to this agreement as was possible in early November, the seminar was opened with presentations by Arthur Kroeger (Deputy Minister, Energy, Mines and Resources Canada) and Loren Cox (Columbia University) on Canada-U.S. energy trade.

Mr. Kroeger spoke to the spirit of the proposed agreement and some of the technical issues and questions raised by it. The Free Trade Agreement (FTA) is intended to build on the move toward energy deregulation on both sides of the border. The concept of a continental energy market in the context of the Free Trade Agreement means that restrictions on energy flows, discrimination in pricing practices or fiscal initiatives (e.g., import or export taxes), and protectionist measures in energy development will be reduced and, wherever possible, eliminated between Canada and the U.S..

Mr. Cox spoke of the structural changes which are taking place in the United States, away from industry and toward a services-based economy. The reduction in energy input requirements, combined with the introduction of energy-efficient technologies and capital stock, argue against the large growth in U.S. imports of energy that Canadians may be counting on for future energy resource development.

Mr. Cox suggested that Canada may be taking a great risk if it does not aggressively pursue current export opportunities. The possibility of a "post-petroleum" energy era is too close to ignore, he said, and Canada would be wise to reap whatever benefits can be realized now from the sale of its hydrocarbon resources.

With this overview, participants at the seminar discussed the future of Canadian energy trade. The following summarizes the general feelings expressed by participants regarding energy trade. First, energy costing and pricing must account fully for the economic, social and environmental costs incurred in producing and transporting the energy to the market. This principle should apply equally to domestic and export sales. Frequent concerns were expressed that electricity prices often failed to achieve this objective.

Second, the gains (employment, investment opportunities, regional development) from international energy trade outweigh the risks of exporting domestic resources (e.g. reducing any comparative advantages based on access to abundant cheap energy supplies, and possibly altering security of supply) and such trade should be pursued.

Third, participants conveyed a strong message that the barriers to interprovincial trade must also be addressed, and that future energy policies should focus on interprovincial issues (e.g., wheeling of electricity among provinces and considering options for enhancing energy commodity transportation systems for all energy forms).

Overall, participants endorsed reduced public sector regulatory presence in the market place.

However, a number of concerns were raised regarding the proposed FTA. The different approaches of Canada and the U.S. to energy, including differences in resource ownership, compatability of regulatory systems and fiscal regimes were seen as sources of potential difficulties in the future. The participants also perceived a significant weakening in the ability of both the federal and provincial governments to pursue individual energy policy initiatives. The issue of proportional sharing of energy production between domestic and export markets raised concerns over control of Canada's non-renewable energy sources. Some participants were concerned that the FTA may limit our ability to control our energy resources to best serve the long-term interests of Canadians.

C. Regulation of Energy Exports

The plenary session on export regulation included presentations by Jacques Guevremont (Hydro-Quebec) and Neil Meehan (Ontario Hydro) on regulation of electricity exports.

In Mr. Guevremont's view, it is in the best interest of Canada to pursue electricity export opportunities, and to pursue a full rate of return on electricity sales, whether in Canada or abroad. Mr. Guevremont questioned the relevance of a surplus test for electricity exports, given the untapped hydroelectric potential existing in Canada and given the fact that electricity is a "manufactured" product rather than a natural resource. He also questioned the role of the federal government in electricity export price regulations, given the scrutiny by provincial governments and provincial review boards of export proposals.

Mr. Meehan proposed that construction of generating capacity to serve export markets is inappropriate and inconsistent with the mandate of public utilities, which should be to provide least-cost power to its customers. The question of surplus determination and security of electricity supply is a national issue, he said, and therefore lies beyond the jurisdiction of even the most vigilant provincial agency. Both speakers agreed that any export license terms should be consistent with the life of the generating facility.

In summary, both speakers saw a role for National Energy Board (NEB) regulation of electricity exports although they differed considerably with regard to the degree of involvement. Mr. Meehan argued for active regulation similar to the current NEB regime, while Mr. Guevremont suggested the Board's role should be limited to monitoring.

Many participants also saw a role for federal regulation. Specifically, that the federal government develop clear, firm guidelines and standards that would incorporate the full environmental and social costs of resource development into the costing and pricing practices of Canadian energy producers.

Most participants were uncomfortable with an active regulatory presence for the federal government in the pricing and costing of energy exports. Indeed, the group expressed support for the current policy changes regarding natural gas and oil exports toward a deregulated, freer energy market.

On the role of the NEB, participants generally agreed that the NEB should perform the functions of information dissemination (on costs, guidelines, market developments, contracts, etc.) and monitoring of the energy sector. Many could foresee no active regulatory role for the NEB in the pricing and marketing of energy. In an environment where export transactions are free of volume and price restrictions, some participants perceived a role for the NEB. They proposed that the Board act as an arbiter in a complaint-activated appeal mechanism which would deal with concerns of export prices below cost of production and price discrimination between markets.

Many participants believe that interprovincial barriers to energy trade are a real problem in Canada. This view was based on three key concerns:

(i) Limited ability to wheel electricity between and across provinces. Wheeling could provide interprovincial solutions to capacity constraints and provide all provinces with access to export markets for electricity;

(ii) Inadequacy of interprovincial links relative to cross-border ties to the U.S. for electricity transmission; and

(iii) Constraints on the movement of crude oil and natural gas across Canada, both physical and regulatory.

In general, participants felt that much was to be done in the area of interprovincial barriers to energy trade, perhaps more so than on Canada-U.S. barriers.

Finally, participants addressed the issue of capacity prebuild, or construction of dedicated facilities, for export sales. While there was no unanimity on this issue, a number of proposals were put forward. Capacity expansion in any energy form must be accompanied by firm, long-term contracts for purchase. Decisions to expand facilities on the basis of perceived export demand poses unacceptable financial risks to Canadians. Participants from public interest groups argued that the role of ratepayers, environmentalists, consumer groups and other interested parties in discussions of such proposals must be enhanced. Much attention was directed in this regard to the James Bay II proposal.

D. Security of Energy Supply

The plenary session on Security of Energy Supply consisted of three speakers:

Glen Toner (Carleton University) explained Canada's obligations within the International Energy Agency (IEA) in the event of an international crude oil supply disruption. His central message was that unilateral actions in response to a supply disruption would likely be ineffective, including the reliance on a Strategic Petroleum Reserve, in the absence of a coordinated, international stockdraw. Mr. Toner emphasized that, on the international energy market, Canada is a high cost producer and a price taker, and is as exposed to international disruptions either in prices or supply as any crude oil importer.

In his view, it would be prudent for Canada to establish and maintain a 60 day Strategic Petroleum Reserve in the face of declining domestic production of light crude oil, increasing import dependence, and the absence of a national, integrated crude oil transportation system. Over the medium term, Mr. Toner proposed upgrading Canada's refinery capacity to process heavy crudes and continued promotion of off-oil conversion to enhance Canada's energy security.

Ralph Torrie (Torrie, Smith and Associates) explained the significant role that energy efficiency and conservation initiatives played in increasing Canada's energy security over the past ten years. He also noted that although the gains are impressive, efficient use of energy in Canada continues to be the lowest of all industrialized nations. Mr. Torrie underscored the important impact that de-linking economic output and energy use has had in Canada over the last decade. In his view, given the contribution that efficient use of energy can make, a scenario of continued economic growth with declining energy demand is realistic and achievable.

Mr. Torrie provided a list of key characteristics that future energy systems require if they are to be judged as secure. These characteristics include resiliency, diversity, and small size (and cost) with short lead times, to cope with the volatile and uncertain markets anticipated in the future. Energy systems must also be environmentally benign in order to be sustainable, and should be designed on the "safe fail" principle. That is, knowing that any system will eventually fail, we should adopt energy systems which are in keeping with the ability of our economy and ecology to absorb that failure.

Mr. Hans Maciej (Canadian Petroleum Association) outlined Canada's remaining crude oil and natural gas resources. He noted that, of the 74 billion barrels of conventional reserves in place in the Western Sedimentary Basin, only 29 percent of light/medium crude and 9 percent of heavy crude reserves can be recovered under current technologies. Therefore, advances in recovery technology to access the 56 billion barrels of crude which will be "left behind" would represent an enormous potential contribution to Canada's energy security.

Mr. Maciej discussed the volume of reserves in place in western Canada's bitumen deposits, in the northern frontier regions, and in the east coast offshore region. In his view, the reserves of crude oil and natural gas in the Grand Banks and Scotian shelf represent a medium-term solution to the energy security concerns of the Atlantic provinces and Quebec.

There was consensus among participants on most aspects of the security question. The risk of a domestic energy supply interruption was felt to exist in electricity (inadequate transmission, localized capacity constraints) and in crude oil. With regard to the latter, most participants concurred that security of crude oil supply is an eastern Canadian problem requiring a national solution. Considerable support was given to the concept of a Strategic Petroleum Reserve (or reserves) as a short-term, emergency preparedness measure. Equity considerations weighed in favour of the cost of the reserve being financed by all Canadians.

On a broader level, participants felt that energy security is an important national issue both over the short and long term for Canada, noting in particular the link between energy security and economic stability. The need for energy preparedness measures was strongly supported, so that an emergency situation would not jeopardize efficient, economic resource development.

Participants encouraged continued research and development in the areas of efficiency of energy use, supply and resource recovery. On the other hand, most participants felt that projects such as frontier and tar sands development should proceed only when it is economically and commercially feasible to do so.

Finally, participants were impressed by the potential gains yet to be made on the demand side of the energy equation and the contribution that movement in this direction can make towards energy security. It was felt that energy policy should actively promote energy efficiency initiatives, capital replacement and conversion from oil-based fuels to alternative fuels, particularly in the transportation sector. It was also felt that potential consumer gains are such that they would more than offset their cost and government financial incentives should not be necessary.

E. Foreign Investment

Allan Rugman (University of Toronto) gave the final plenary address, on foreign investment in Canada's energy sector. He outlined the negative impact which the National Energy Policy of the early 1980s and the Federal Investment Review Agency had on foreign investment and energy activity in Canada. He suggested that the FTA, by

narrowing the scope for large swings in domestic energy policy, would have a positive impact on both foreign and domestic investment in Canada. He also suggested that foreign controlled firms have an equal or better track record than do Canadian controlled firms in terms of capital expenditures and investment in Canada's energy sector, implying a long term commitment to the development of Canada's resources. He suggested that it is the performance of the capital, not the ownership, which is important to Canada's energy future. Mr. Rugman recommended that all controls on foreign ownership and investment in the energy sector be relaxed as soon as possible.

The participants gave cautious approval to greater direct foreign investment in Canada's energy sector, noting the need for such investment to undertake large energy projects in the future. They noted that there is less concern over ownership and control than was the case in the early 1980s, and that policies regarding direct foreign investment must be kept in step with the overall move to greater deregulation in the energy sector.

However, participants also believed that Canadians should have full opportunity to invest in new energy projects, and that Canadian manufacturers and labour, particularly local labour, should have the first opportunity to benefit from energy project or resource development.